

U. S. PLANT PATENT APPLICATION OF

MARK A. SMITH

FOR: CHRYSANTHEMUM PLANT NAMED

‘SUNNY YOBIANCA’

SMITH, Mark A.

TITLE: CHRYSANTHEMUM PLANT NAMED 'SUNNY
YOBIANCA'

APPLICANT: MARK A. SMITH

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

5 *Chrysanthemum X morifolium* cultivar Sunny Yobianca

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Chrysanthemum X morifolium*, commercially known as a garden-type Chrysanthemum and
10 hereinafter referred to by the name 'Sunny Yobianca'.

The new cultivar is a product of a planned breeding program conducted by the Inventor in Alva, Florida. The objective of the breeding program is to create new garden-type Chrysanthemum cultivars having inflorescences with desirable inflorescence forms, attractive floret colors
15 and good garden performance.

The new Chrysanthemum is a naturally-occurring whole plant mutation of the *Chrysanthemum X morifolium* cultivar Yobianca, disclosed in U.S. Plant Patent number 13,761. The new Chrysanthemum was discovered and selected by the Inventor as a single flowering plant

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from within a population of plants of the cultivar Yobianca in a controlled environment in Alva, Florida in April, 2002. The selection of this plant was based on its desirable inflorescence form, attractive ray floret color and good garden performance.

5 Asexual reproduction of the new cultivar by terminal vegetative cuttings taken in a controlled environment in Alva, Florida since June, 2002, has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

10 The cultivar Sunny Yobianca has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength and light intensity, without, however, any variance in genotype.

15 The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Sunny Yobianca'. These characteristics in combination distinguish 'Sunny Yobianca' as a new and distinct cultivar:

1. Upright and somewhat outwardly spreading plant habit.
2. Freely branching habit; dense and full plants.
- 20 3. Uniform and freely flowering habit.

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4. Small decorative-type inflorescences with elongated oblong-shaped ray florets.
5. Yellow-colored ray florets.
6. Natural season flowering in late September in the Northern Hemisphere.

In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the parent, the cultivar Yobianca, primarily in ray floret coloration as plants of the cultivar Yobianca had creamy white-colored ray florets.

Plants of the new Chrysanthemum can be compared to plants of the Chrysanthemum cultivar Legend, disclosed in U.S. Plant Patent number 6,404. In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Legend in the following characteristics:

1. Plants of the new Chrysanthemum were slightly larger and more rounded than plants of the cultivar Legend.
2. Plants of the new Chrysanthemum flowered about three days later than plants of the cultivar Legend when grown under natural season conditions.

3. Plants of the new Chrysanthemum flowered about one week later than plants of the cultivar Legend when grown under artificial short day/long night photoperiodic conditions.
4. Plants of the new Chrysanthemum had smaller inflorescences than plants of the cultivar Legend.

Plants of the new Chrysanthemum can also be compared to plants of the Chrysanthemum cultivar Parakeet, disclosed in U.S. Plant Patent number 11,323. In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Parakeet in the following characteristics:

1. Plants of the new Chrysanthemum were larger, more rounded and denser than plants of the cultivar Parakeet.
2. Plants of the new Chrysanthemum flowered about three weeks later than plants of the cultivar Parakeet when grown under natural season conditions.
3. Plants of the new Chrysanthemum flowered more uniformly than plants of the cultivar Parakeet.
4. Plants of the new Chrysanthemum had smaller inflorescences than plants of the cultivar Parakeet.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new Chrysanthemum. These photographs show the colors as true as it is reasonably possible to obtain in colored reproductions of this type.

5 Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Chrysanthemum.

The photograph on the first sheet comprises a side perspective view of a typical flowering plant of 'Sunny Yobianca' grown in a container.

10 The photograph on the second sheet comprises a close-up view of typical inflorescences of the cultivar 'Sunny Yobianca'.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where general
15 terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown in Alva, Florida during the winter in a fiberglass-covered greenhouse under conditions and practices which approximate those generally used in commercial garden-type Chrysanthemum production. One cutting was planted in a 15.25-cm
20 container in early December, 2002. Plants were pinched one time, that is, the terminal apex was removed to enhance branching, at the end of

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December. One week after the pinch, plants were exposed to short day/long night photoperiodic treatments until flowering. During the production of the plants, day temperatures averaged 26°C and night averaged 18°C. Measurements and numerical values represent averages
5 for typical flowering plants.

BOTANICAL CLASSIFICATION:

Chrysanthemum X morifolium cultivar Sunny Yobianca.

COMMERCIAL CLASSIFICATION:

Decorative-type garden Chrysanthemum.

10 PARENTAGE:

Naturally-occurring whole plant mutation of the *Chrysanthemum X morifolium* cultivar Yobianca, disclosed in U.S. Plant Patent number 13,671.

PROPAGATION:

15 Type: Terminal vegetative cuttings.

Time to initiate roots: About four days at 21°C.

Time to produce a rooted cutting: About ten to twelve days at 21°C.

Root description: Fine, fibrous; white in color.

20 Rooting habit: Freely branching.

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PLANT DESCRIPTION:

- Plant form/growth habit: Perennial herbaceous decorative-type garden Chrysanthemum. Inverted triangle with mounded crown. Stems initially upright, then somewhat outwardly spreading. Freely branching with lateral branches potentially developing at every nodes. Moderately vigorous.
- 5 Plant height: About 19.5 cm.
- Plant diameter: About 24 cm.
- Lateral branches:
- 10 Length: About 17 cm.
- Diameter: About 3.5 mm.
- Internode length: About 9 mm.
- Aspect: Upright and outwardly spreading.
- Texture: Pubescent.
- 15 Color: Close to 146A.
- Foliage description:
- Leaf arrangement: Alternate.
- Length: About 4.7 cm.
- Width: About 4.2 cm.
- 20 Apex: Cuspidate.
- Base: Truncate.

Margin: Palmately lobed, sinuses divergent to parallel.

Texture, upper surface: Slightly pubescent.

Texture, lower surface: Pubescent; veins prominent.

Color:

5 Developing and fully expanded foliage, upper
 surface: Close to 147A.

Developing and fully expanded foliage, lower surface: 147B.

Venation, upper surface: 147A to 147B.

10 Venation, lower surface: 147B.

Petiole length: About 1.7 cm.

Petiole diameter: About 2 mm.

Petiole color, upper surface: 147A to 147B.

Petiole color, lower surface: 147B to 147C.

15 INFLORESCENCE DESCRIPTION:

Appearance: Decorative-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage, arising from leaf axils. Disc and ray florets developing acropetally on a capitulum. About 12 inflorescences per lateral branch.

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Flowering response: Under natural season conditions, plants flower in late September in the Northern Hemisphere.

Inflorescence bud (before showing color):

Height: About 4 mm.

5 Diameter: About 6 mm.

Shape: Oblate.

Color (lower surface of phyllaries): Close to 147A.

Inflorescence size:

Diameter: About 3.25 cm.

10 Depth (height): About 1.3 cm.

Disc diameter: About 2 mm; inconspicuous.

Receptacle diameter: About 3.5 mm.

Ray florets:

Shape: Elongated oblong.

15 Length: About 1.5 cm.

Corolla tube length: About 2.75 mm.

Width: About 4 mm.

Apex: Acute or emarginate.

Margin: Fused.

20 Texture: Smooth, glabrous; satiny.

Surface: Flat to recurved.

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Orientation: Initially upright, then perpendicular to vertical to reflexing.

Number of ray florets per inflorescence: About 152 in numerous whorls.

5 Color:

When opening and fully opened, upper surface:
Close to 6B to 6C; color becoming close to 6D with development.

10 When opening and fully opened, lower surface:
Close to 6D.

Disc florets:

Shape: Tubular; apex dentate, five-pointed.

Length: About 3 mm.

Width, apex: About 1.25 mm.

15 Width, base: About 1 mm.

Number of disc florets per inflorescence: About 15.

Color:

Immature: Close to 154A.

Mature:

20 Apex: Close to 9A.

Mid-section: Close to 150D.

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Base: Close to 155D.

Phyllaries:

Quantity per inflorescence: About 22.

Length: About 5 mm.

5 Width: About 1 mm.

Shape: Ligulate.

Apex: Acute.

Base: Truncate.

Margin: Entire.

10 Texture, upper surface: Smooth, waxy.

Texture, lower surface: Pubescent.

Color, upper surface: Close to 146A.

Color, lower surface: Close to 147A.

Peduncle:

15 Length:

First peduncle: About 4.2 cm.

Fourth peduncle: About 6.6 cm.

Seventh peduncle: About 7.1 cm.

Diameter: About 1 mm.

20 Strength: Strong.

Aspect: About 35 to 40° from vertical.

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Texture: Pubescent.

Color: Close to 146A.

Reproductive organs:

Androecium: Present on disc florets only.

5 Anther color: 9A.

Pollen: None observed.

Gynoecium: Present on both ray and disc florets.

Seed/fruit: Seed and fruit production has not been observed.

DISEASE/PEST RESISTANCE:

10 Plants of the new Chrysanthemum have not been shown to be
resistant to pathogens and pests common to Chrysanthemums.

GARDEN PERFORMANCE:

15 Plants of the new Chrysanthemum have been observed to be
tolerant to rain, wind and temperatures ranging from 0 to more than
38°C.